# NATURAL RESOURCES CONSERVATION SERVICE CONSERVATION PRACTICE STANDARD SOUTH DAKOTA SUPPLEMENTS ITALICIZED

# RECREATION TRAIL AND WALKWAY

(ft.) CODE 568

# **DEFINITION**

A pathway prepared especially for pedestrian, equestrian, and cycle travel.

#### **PURPOSE**

This practice may be applied as part of a resource management system to support one or more of the following:

To provide users of recreation areas with travel routed for activities such as walking, sightseeing, horseback riding, and bicycling;

To prevent erosion on or along pathways;

To preserve and protect soil, plant, animal, and visual resources.

# CONDITIONS WHERE PRACTICE APPLIES

This standard applies where prepared paths, trails, and walkways are needed for effective and safe use of the recreation resources.

#### CONSIDERATIONS

### **Water Quantity**

Impacts of impervious walkways and trails on increased surface runoff.

Changes in deep percolation with increased surface runoff. Consider evaporation losses before infiltration, evapotranspiration changes with decreased infiltration, and average changes in root zone storage.

# **Water Quality**

Change in ground water quality caused by decreased dissolved chemical infiltration.

Potential changes in erosion and sediment yield caused by increase runoff and temporary increases in erosion during construction.

Effects of dissolved chemicals in runoff resulting from recreation activities.

#### **CRITERIA**

Laws and Regulations. This practice must conform to all federal, state, and local laws and regulations. Law and regulations of particular concern include those involving water rights, land use, land disturbance by construction, pollution control, property easements, wetlands, preservation of cultural resources, and endangered species.

Visual resources. Special attention shall be given to saving and maintaining key trees and other vegetation that have scenic value, provide shade, reduce erosion and runoff, provide den and food for wildlife, or add to the visual quality of the area. Equipment travel or parking shall not be allowed within an imaginary circle on the ground defined by the dripline of the crown of any tree to be saved.

**Grade and Width.** Sustained grades shall be dictated by good judgement for the purpose intended, considering the topography, and shall not exceed 10 percent.

Generally, the minimum treat width shall be four feet. The width in cuts for pedestrian trails on sidehill sections may be reduced to three feet if greater width would increase the cost materially or adversely affect the visual resources.

Riding trails can vary from specific grades, widths, and clearing requirements if so dictated by location, topography, or purpose.

Local building codes may apply.

Conservation practice standards are reviewed periodically and updated if needed. The current version of this standard is posted on our website at <a href="www.sd.nrcs.usda.gov">www.sd.nrcs.usda.gov</a> or may be obtained at your local Natural Resources Conservation Service.

**Side slopes.** Cut and fill slopes shall be stable for the soil or soil material.

Earth side slopes must be 2:1 or flatter except slopes to be moved must be 3:1 or flatter.

Alignment. Curves are desirable in trails and walkways. If switchbacks are necessary, stone walls, shrubs, or other obstructions should separate segments above and below the curve to reduce cross cutting and protect lower level users from falling objects up above. Minimum radius of curves for cycle trails should be at least 15 feet.

Clearance. Minimum height clearance should be at least two feet higher than riders on animals or vehicles using the trail. Minimum clearance height should be at least eight feet. Edge clearance should be at least two feet.

**Drainage.** Adequate drainage shall be provided. A raised or elevated trail or walkway may be required for wet sites that cannot be drained.

Erosion control. Plans shall include provisions for control of erosion. Distributed areas shall be established to vegetation as soon as practicable after construction. If soil or climatic conditions precludes the use of vegetation, and protection is needed, nonvegetative means, such as mulches or gravel, may be used. Seedbed preparation, seeding, fertilizing, and mulching shall comply with recommendations in technical guides.

**Bridges.** Bridges shall be designed for the maximum expected loading with an adequate factor of safety, but not less than 100 pounds per square foot. Bridges must have effective guardrails.

**Surfacing.** If surfacing is required for a firm trail, the surfacing material may be pit or creek-run gravel, concrete, asphalt, or other material that can withstand the traffic and the elements at the site.

Rest Areas. Rest areas should be provided along trails and walkways, especially after reaches requiring strenuous effort. Maximum spacing should vary according to effort expended in using the trail. Rest areas should be provided near special points of interest.

Natural features such as logs or rocks are desirable for use as benches when resting.

Long trails and walkways should have simple shelters spaced no further apart than one and a half miles. Sanitary facilities must be placed at shelters and at ends of trails and walkways as necessary.

**Safety.** Due consideration shall be given to safety. Protection from slides and falling rocks shall be provided, if needed. Adequate directional and warning signs, handrails, bridges, and culvert shall be placed as dictated by the site and intended use.

**Maintenance.** Provisions shall be made for maintaining all wearing surfaces, signs, and drainage structures.

**General.** Equestrian and pedestrian trails may vary from specific grades, widths, and clearing requirements if so dictated by location and topography.

#### PLANS AND SPECIFICATIONS

Plans and specifications for constructing recreation trails and walkways shall be in keeping with this standard and shall describe the requirements for applying the practice to achieve its intended purpose.

#### OPERATION AND MAINTENANCE

An Operation and Maintenance Plan must be prepared for use by the landowner or operator responsible for recreation trail and walkway operation and maintenance. The plan should provide specific instruction for operating and maintaining trails and walkways to insure they function properly. Minimum requirements to be addressed in the Operation and Maintenance Plan are:

Prompt repair or replacement of damaged components is necessary;

Repair eroded areas and revegetate as soon as possible. Install erosion control measures, as needed, to stabilize the area.

Repair or replace trail and pathway surface materials, as necessary.

Remove debris and liter from trails and pathway surfaces, adjoining land areas, ditches and drainage facilities.

Maintain drainage facility capacities.

Maintain good vegetative cover on all slopes and watercourses.

List items specific to this project on the Operation and Maintenance Worksheet.